



# TennCare Delivery System Transformation: Patient Centered Medical Home Analytics Report

Report | October 2019



# Contents

Table of Contents .....2

Introduction.....3

**Finding 1:** Quality has improved across the majority of measures .....5

**Finding 2:** Total cost of care improved in the second year of the program compared to the control group.....7

**Finding 3:** Office and clinic care, as well as home and community-based services, increased for PCMH members when compared to the control group.....8

**Finding 4:** Follow-up and preventive care visits with primary care providers for PCMH members has improved.....9

**Finding 5:** Providers report being better able to improve and invest in patient care .....10

## Introduction

TennCare's Patient Centered Medical Home (PCMH) program aims to improve the quality of primary care services for members, the capabilities and reach of primary care providers, and the overall quality of health care delivered to the TennCare population. TennCare believes that a strong primary care system is the backbone of a thriving health care delivery system. Primary care transformation focuses on the role of the primary care provider: preventing illness, managing chronic illnesses, coordinating care with other providers, and engaging members in the community. As part of Tennessee's Health Care Innovation Initiative, the state has committed to moving away from paying for volume to paying for value. The mission is to reward health care providers for improving health outcomes by providing high quality and efficient treatment of medical conditions and maintaining people's health over time.

The PCMH program launched in January 2017 and serves children and adults; it aims to pay for improving health outcomes while reducing the cost of medical care. This strategy includes aligned multi-payer Patient Centered Medical Homes (PCMH) for the general population of adults and children, a Tennessee Health Link (THL) model for TennCare members with high behavioral health needs, and a Care Coordination Tool that offers additional information to primary care providers (for example, it alerts primary care providers when their patients go to the emergency room or the hospital).

Tennessee built on the existing PCMH efforts by providers and payers in the state when creating its robust PCMH program and aligning payers on the critical elements. As of October 2019, approximately thirty-seven percent of TennCare members are attributed to a PCMH. In the two years since the program launched, there have been meaningful improvements across quality, cost, member experience, and provider experience. These improvements have been greater and had more impact on members attributed to a PCMH and enrolled in a THL than on members who were not attributed in a PCMH or enrolled in THL.

<b>Finding 1</b>	Quality has improved across 16 of 18 core quality measures
<b>Finding 2</b>	Total cost of care decreased by 3 percent in the second year of the program relative to the control group, offsetting \$40M of initial program investment in the first year
<b>Finding 3</b>	Office and clinic care increased, as did home and community-based services, while emergency department visits and outpatient services decreased for PCMH members compared to the control group
<b>Finding 4</b>	The PCMH program (vs. the control group) appears to be motivating members who have not been to a PCP recently to obtain preventive services,

	and encouraging members to follow-up with primary care providers after an inpatient hospital admission or emergency department visit
<b>Finding 5</b>	Providers report being better able to improve care for their patients

## **Finding 1: Quality has improved across the majority of measures**

TennCare selected 18 core quality measures for the PCMH program. Overall, quality has improved for PCMH members, with improvements observed on 16 of 18 core quality measures (see *Exhibit 1*).

The largest improvement was seen in the metric Diabetes Care – Controlling High Blood Pressure (BP < 140/90) which improved by 68 percent per year.

Improvements were also observed in the metrics for Weight Assessment and Nutrition Counseling for Children and Adolescents with a 26 percent per year increase in the documentation of BMI percentile and a 40 percent per year increase in counseling for nutrition. BMI Screening for Adults also increased by 22 percent per year.

Early and Periodic Screening, Diagnostic and Treatment (EPSDT) screening rates increased by 7 percent, 4 percent, and 8 percent per year for well-child visits ages <15 months, 3-6 years, and 7-11 years of age respectively. However, well-child visits at 18, 24, and 30 months decreased over that same time period. The PCMH program, along with the health plans, are continuing to monitor this measure and develop strategies to increase well-child visits during this age range.

Childhood immunization rates increased by 20 percent per year and asthma medication compliance increased by 12 percent per year. The metric definition for the Immunizations for Adolescents measure changed from 2017 to 2018 to reflect the 2-dose HPV vaccination series which made a year to year comparison difficult to complete.

**Exhibit 1: Overview of Quality Metric Performance for the PCMH Program, from 2016-2018**

Metric	Submetric	Change per year, in %	Metric	Submetric	Change per year, in %
Asthma medication management	Medication Compliance 75% (Total)	12%	EPSDT Screening Rate (composite for younger kids)	Well-child visits first 15 months	7%
Comprehensive diabetes care (composite 1)	Eye exam	17%		Well-child visits at 18, 24, & 30 months	-21%
	BP < 140/90	68%		Well-child visits ages 3-6 years	4%
	Nephropathy	<1%	Immunization composite	Immunizations for adolescents – combination 2	N/A
Comprehensive diabetes care (composite 2)	HbA1c testing	3%	Childhood immunizations	Combination 3	20%
	HbA1c poor control (>9%)	-6%	Weight assessment and nutritional counseling for children and adolescents	BMI percentile	26%
EPSDT Screening Rate (composite for older kids)	Well-child visits ages 7-11 years	8%		Counseling for nutrition	40%
	Adolescent well-care visits ages 12-21 years	5%	Adult weight assessment	BMI screening	22%
Antidepressant medication management	Effective acute phase treatment	0%			
	Effective continuation phase treatment	16%			

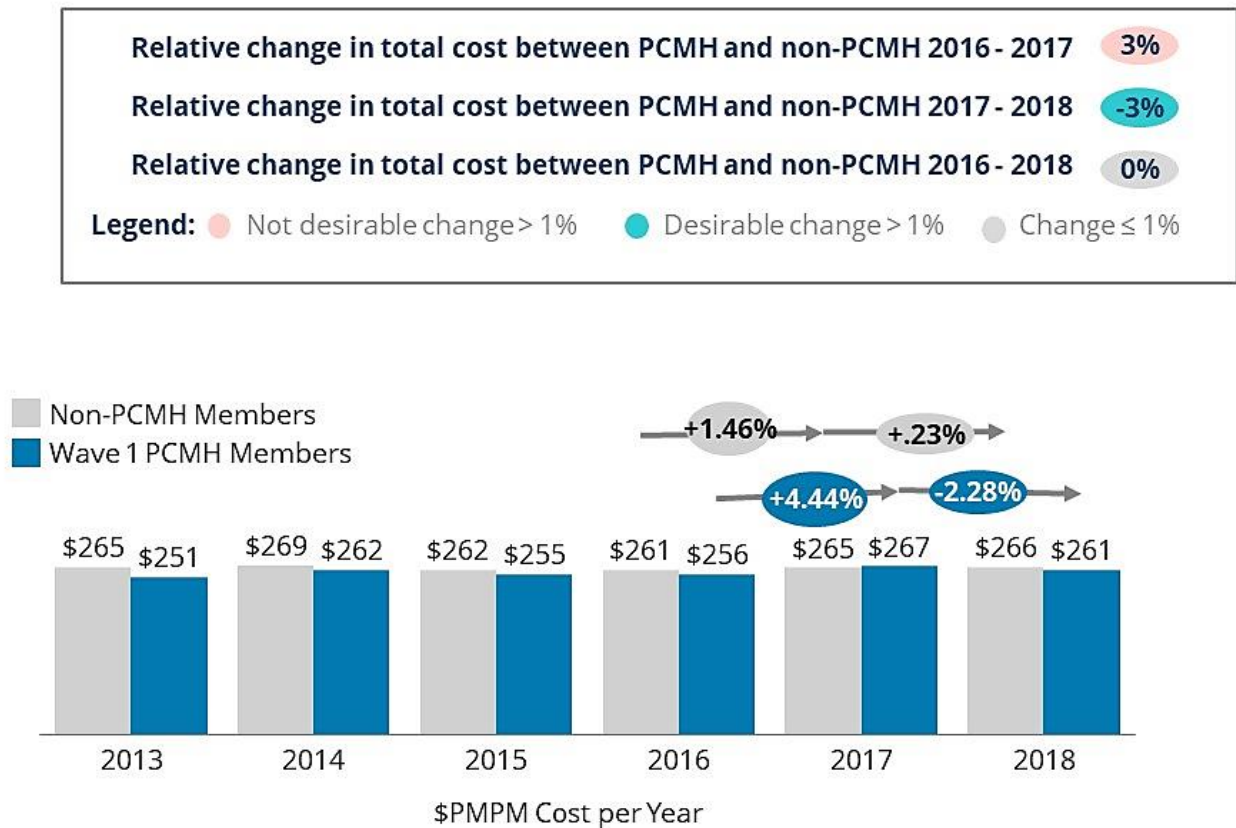
## Finding 2: Total cost of care improved in the second year of the program compared to the control group

Starting in Year 2 of the program, PCMH program participants saw improvements in total cost of care compared to members not in PCMH. The cost increase that occurred in the first year was driven by increased investment in the program. Evaluation of similar primary care transformation programs in other states, also showed that it took at least one to two years to achieve net savings at the earliest.

Wave 1 PCMH members had a 3 percent increase in total cost of care in the first year (2017) of the program, followed by a 3 percent decrease in total cost of care in the second year of the program, relative to the control group (see *Exhibit 2*). Wave 2 PCMH members, who started a year later, also had a 3 percent increase in total cost of care in the first year (2018) of the program.

For Wave 1 providers in the first year, nearly \$40 million was invested into supporting primary care providers and helping them improve member engagement, support care coordination, and invest in patient-centered care opportunities. By the second year, this investment appears to have contributed to the improvements in health outcomes and the reduction in the total cost of care provided to these members.

*Exhibit 2: Wave 1 PCMH vs Non PCMH Total Cost of Care per Member per Month, 2013 - 2018*





### Finding 3: Office and clinic care, as well as home and community-based services, increased for PCMH members when compared to the control group

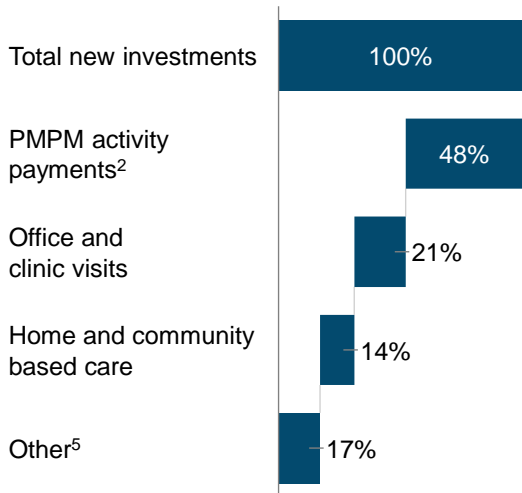
Increases in the total cost of care were primarily driven by office and clinic care services, home and community-based care, and activity payments (see *Exhibit 3*). Activity payments support organizations as they invest the time and labor required to evolve their care delivery models to better coordinate patient-centered care for their members.

Reduction in the total cost of care, for PCMH members (vs. the control group) was driven by a decline in hospital outpatient services, emergency department visits and ancillary services (e.g. lab work, radiology and imaging).

**Exhibit 3: Overview of Services Impacting Wave 1 Total Cost of Care (TCOC) between 2016 – 2018**

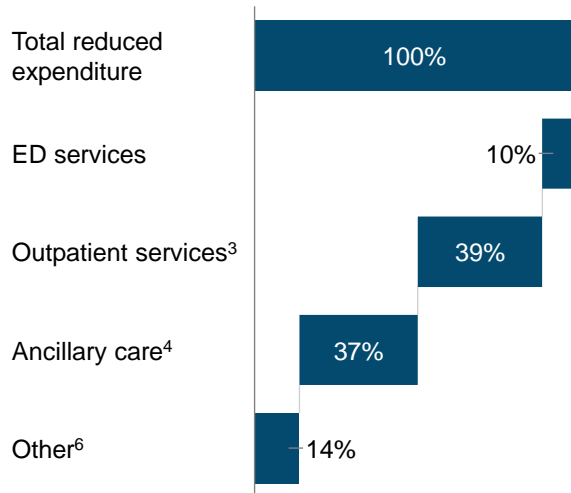
#### Services increasing in Wave 1 vs control from 2016-18, % of total

Total risk-adjusted TCOC PMPM change vs. control<sup>1</sup> = \$8.45



#### Services decreasing in Wave 1 vs control from 2016-18, % of total

Total risk-adjusted TCOC PMPM change vs. control<sup>1</sup> = \$8.55



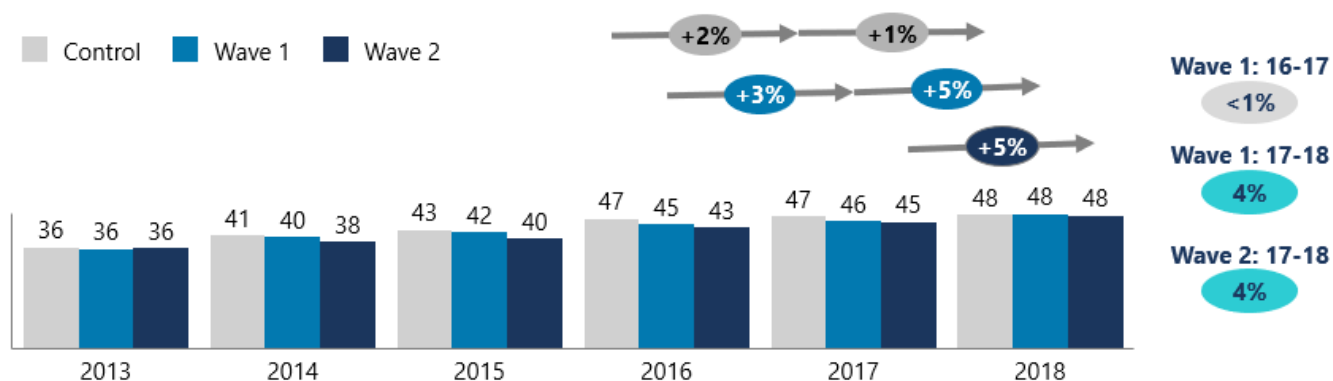
1 Total cost of care includes activity payments. Activity payments are payments to providers to support evolution to care delivery model (e.g., care coordination, staffing, enhanced opening hours etc.)  
 2 Activity payments are used to fund care coordination activities  
 3 The procedure that accounts for the most reduced expenditure is: “outpatient clinic visit for assessment and management of a patient” which has a 14% impact  
 4 Ancillary care include services such as employment, personal care, respite, crisis management, education, home health etc.  
 5 Includes treatment and evaluation at other locations of care, hospital inpatient care, lab/pathology, radiology and DME  
 6 Includes physical/occupational/speech therapy, pharmaceuticals,



## Finding 4: Improvement in follow-up and preventive care visits with primary care providers for PCMH members

Primary care follow-ups after acute events have improved. Follow-up with primary care providers within seven days of an emergency department visit increased by 4 percent for Wave 1 and Wave 2 PCMH members relative to the control group from 2017 – 2018 (see *Exhibit 4*).

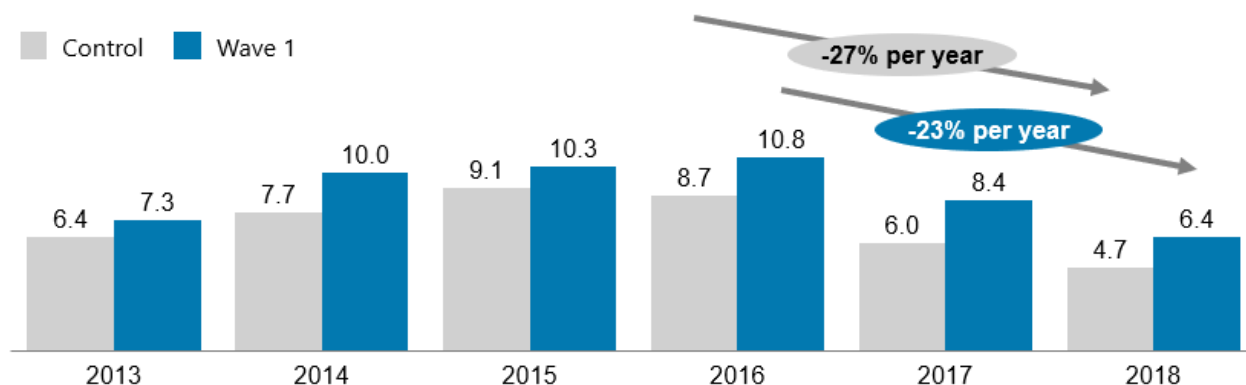
**Exhibit 4: Improvement in PCP follow-up rates seven days after an emergency department visit, in %**



Follow-up with primary care providers within seven days of a discharge from an inpatient hospital admission increased by 2 percent and 3 percent for Wave 1 and Wave 2 PCMH members respectively (vs. the control group from 2017 – 2018). Both results suggest that primary care providers in the PCMH program have had increased success in engaging and managing transitions of care for their patients after emergency department visits and hospitalizations.

PCMH providers in the second year of the program were more effective at getting members who have not been to a PCP in the past two years to complete a preventive care visit (compared to non-PCMH). This means that as the program progresses the number of non-engagers will gradually reduce (see *Exhibit 5*).

**Exhibit 5: PCMH members who have not had a PCP visit in the prior two years but came in for a preventive service visit in the current year (as a proportion of all current year members without a PCP visit in the prior two years), in %**



## **Finding 5: Providers report being better able to improve and invest in patient care**

Overall, PCMH providers reported in focus groups that the Care Coordination Tool (CCT) – which provides information on admissions, transfers, and discharges (ADT) – makes PCMH members’ needs more transparent. Providers can better detect gaps in care, proactively reach out to patients (e.g. after a discharge), and “treat the whole patient” more effectively by sharing information with other providers (e.g., between THL and PCMH providers). The ADT data is the most actionable information that the CCT provides to PCMH and Tennessee Health Link providers. All hospitals in Tennessee are currently providing a live ADT feed to the CCT.

Providers also reported that they invested additional funds from the program in staff (e.g., care coordinators, referral nurses, other support staff) and additional services.

The program also appears to have improved members’ interaction with their primary care physician with some providers reporting that “[members] are getting a lot more attention.”